

U.S. Serial No. 10/587,723
8325-0036.31
S36-US3

PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

MILLER et al.

Application No.: 10/587,723

International Appl. No. PCT/US2005/003245

International Filing Date: February 3, 2005

Title: METHODS AND COMPOSITIONS FOR
TARGETED CLEAVAGE AND RECOMBINATION

Examiner:

Group Art Unit: 1636

Confirmation No.: 2253

Customer No.: 20855

REQUEST FOR REPUBLICATION TO CORRECT A MATERIAL ERROR

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313

Sir:

Patent Application Publication US 2007/0218528 A1 published on September 20, 2007. Applicants have two months from the date of publication to request that the publication be amended. As such, this request is submitted prior to the **November 20, 2007** due date.

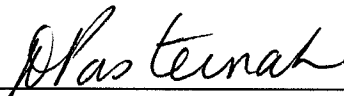
Applicants request that Publication US 2007/0218528 A1 be amended to correct the material error made by the U.S. Patent and Trademark Office, namely omitting an inventor. Publication US 2007/0218528 A1 lists only Jeffrey C. Miller as inventor. However, the pending application should also list Lei Zhang as an inventor, as shown on the attached copy of the Filing Receipt. As such, please republish Publication US 2007/0218528 A1 to list both Jeffrey C. Miller and Lei Zhang as inventors. A copy of Publication US 2007/0218528 A1 showing the change to be made is attached herewith.

U.S. Serial No. 10/587,723
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As this request is being submitted to correct an error made by the U.S. Patent and Trademark Office, no fees should be required by this request. However, if fees are required, the Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§1.16, 1.17, and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 18-1648.

Respectfully submitted,

Date: November 15, 2007

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APPL NO.	FILING OR 371(c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLMS	IND CLMS
10/587,723	04/25/2007	1636	1230	8325-0036.31 (S36-US3)	14	1

CONFIRMATION NO. 2253 ✓

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FILING RECEIPT



OC000000025389780

Date Mailed: 08/17/2007

Receipt is acknowledged of this nonprovisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

Applicant(s)

Jeffrey C. Miller, San Francisco, CA; ✓
 Lei Zhang, Davis, CA; ✓

Assignment For Published Patent Application

Sangamo BioSciences, Inc., Richmond, CA ✓

Power of Attorney:

Dahna Pasternak-41411 ✓

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/US05/03245 02/03/2005 ✓
 which claims benefit of 60/542,780 02/05/2004 ✓
 and claims benefit of 60/556,831 03/26/2004 ✓
 and claims benefit of 60/575,919 06/01/2004 ✓

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ROBINS & PASTERNAK LLP

Foreign Applications

If Required, Foreign Filing License Granted: 06/14/2007

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/587,723**

Projected Publication Date: 09/20/2007 ✓

Non-Publication Request: No

Early Publication Request: No

Title

Methods and Compositions for Targeted Cleavage and Recombination ✓

Preliminary Class

435

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US 20070218528A1

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2007/0218528 A1****Miller**(43) **Pub. Date: Sep. 20, 2007**(54) **METHODS AND COMPOSITIONS FOR
TARGETED CLEAVAGE AND
RECOMBINATION****Publication Classification**(75) Inventor: **Jeffrey C. Miller**, San Francisco, CA(US); **Lei Zhang**, Davis, CA (US)

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CA (US)(21) Appl. No.: **10/587,723**(22) PCT Filed: **Feb. 3, 2005**(86) PCT No.: **PCT/US05/03245**

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(2), (4) Date: **Apr. 25, 2007****Related U.S. Application Data**(60) Provisional application No. 60/542,780, filed on Feb.
5, 2004. Provisional application No. 60/556,831, filed
on Mar. 26, 2004. Provisional application No. 60/575,
919, filed on Jun. 1, 2004.(51) **Int. Cl.****C12P 19/34** (2006.01)**C12P 21/06** (2006.01)**C12N 9/22** (2006.01)(52) **U.S. Cl.** **435/91.2; 435/199; 435/69.1;
435/320.1; 435/325**

(57)

ABSTRACT

Disclosed herein are methods and compositions for targeted cleavage of a genomic sequence, targeted alteration of a genomic sequence, and targeted recombination between a genomic region and an exogenous polynucleotide homologous to the genomic region. The compositions include fusion proteins comprising a cleavage domain (or cleavage half-domain) and an engineered zinc finger domain, as well as polynucleotides encoding same. Fusion proteins comprising cleavage half-domains are used in pairs, to reconstitute a functional cleavage domain. In these fusion proteins, the zinc finger domain can be N-terminal to the cleavage half-domain, or the cleavage half-domain can be N-terminal to the zinc finger domain. The availability of fusion endonucleases having these different polarities allows targeting (and thereby binding) of zinc finger endonucleases either to opposite strands of the DNA target or to the same strand of the DNA target, thereby increasing the number of possible sequences which can be targeted and cleaved by the fusion proteins.